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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,842

03/31/2004

Shaula Alexander Yemini

EMC-SMARTS

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24227

7590

12/04/2006

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EXAMINER

CHUNG, EUN HEE

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,842

Applicant(s)

YEMINI ET AL.

Examiner

Eun H. Chung

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-319 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-319 is/are rejected.
- 7) ☒ Claim(s) 72a, 150, 151, and 235 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-234 and 236-316 are presented for examination.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 72a has been renumbered 317.

Misnumbered claim - the second 150 has been renumbered 318.

Misnumbered claim - the second 151 has been renumbered 319.

3. Claims 147 and 235 are objected to because of the following informalities:

As per claim 147, there is a duplicate step of (b).

Clam number 235 is missing.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1, 26, 30-32, 44, 62, 64, 88, 111, 147, 169, 205, 236, and 261 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "sufficient" in claims 1(line 16), 62(line 5), 88(line 7), 147(line 6), 205(line 6), and 236(line 5) and "generally" in claims 26(line 2), 64(line 2), 111(line 2), 169(line 2), and 261(line 2) are a relative term which renders the claim indefinite. The term " sufficient " and "generally" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 30-32 and 44 recite the limitation "said plurality of realms" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-13, 15-41, 44-55, 57-80, 82-100, 102-126, 129-140, 142-158, 160-184, 187-198, 200-216, 218-232, 235-248, 250-276, 279-290, 292-300, 302-307, 309, 310, 312, 313, and 315-319 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman-Amuah (US Patent No. 6,289,382).

Bowman-Amuah discloses (Claims 1, 62, 88, 147, 205, and 236) a method, an apparatus (Fig. 1), computer readable medium (Fig. 1), and storage device (Fig. 1 and 124) for modeling a system having one or more components (Fig. 10), comprising:

(Claims 1, 147) (a) dividing said system into one or more components (Fig. 10-14, Col. 105 lines 7-50, Col. 115 lines 27-48, Col. 6 lines 16-63, Col. 124 lines 5-21, Col. 126 lines 2-66, Col. 128 lines 6-29, Col. 153 lines 29-37, Col. 283 lines 13-39);

(Claims 1, 62, 147, 205, 236) (b) defining realms containing objects representing said one or more components (Claims 62, 205) or relationships between components (Col. 115 lines 27-48, Col. 124 lines 5-21, Col. 126 lines 2-66, Col. 128 lines 6-29, Col. 153 lines 29-37, Col. 283 lines 13-39);

(Claims 1, 62, 147, 236) (c) defining associations between realms sufficient to unify objects in said realms (Col. 115 lines 27-48, Col. 117 lines 1-22, Col. 124 lines 5-21, Col. 126 lines 2-66, Col. 128 lines 6-29, Col. 153 lines 29-37, Col. 283 lines 13-39); and

(Claims 1, 147, 205, 236) (d) unifying objects in said realms based on said associations (Col. 115 lines 27-48, Col. 6 lines 16-63, Col. 117 lines 1-22, Col. 124 lines 5-21, Col. 126 lines 2-66, Col. 128 lines 6-29, Col. 153 lines 29-37, Col. 283 lines 13-39);

(Claims 2, 89, 148, and 237) the step of unified processing of two or more realms by performing processing in each of said two or more realms, and combining results thereof based on said associations of said two or more realms (Fig. 1-195, Col. 33 lines 50-56, Col. 78 lines 63-67, Col. 126 lines 2-66, Col. 283 lines 47-67);

(Claims 3, 46, 71, 90, 131, 149, 189, 206, 238, 281) an enterprise management system (Col. 26 lines 64-67, Col. 132 lines 1-10);

(Claims 4, 47, 72, 91, 132, 150, 190, 207, 239, 282, 304, 313, 318) wherein said realms comprise at least one realm modeling business service components and at least one realm modeling infrastructure components (Fig. 1-195, Col. 31 lines 45-60);

(Claims 5, 92, 151, 208, 240, 297, 298, 302, 303, 306, 307, 309, 310, 312, 313, 314, 317, 319) wherein the unified processing identifies infrastructure problems impacting applications, applications impacting business services, or infrastructure problems impacting business services (Fig. 1-195, Col. 103 lines 19-27, Col. 78 lines 63-67, Col. 153 lines 30-37);

(Claims 6, 48, 73, 93, 133, 152, 191, 209, 241, 283) an engineering system (Col. 16 lines 51-61, Col. 125 lines 24-50);

(Claims 7, 49, 74, 94, 134, 153, 192, 210, 242, 284) a distributed system (Col. 49 lines 15-30, Col. 52 lines 16-33, Col. 94 lines 60-67);

(Claims 8, 50, 75, 95, 135, 154, 193, 211, 243, 285) an application server system (Col. 26 lines 20-23, Col. 33 lines 57-67, Col. 95 lines 1-8);

(Claims 9, 51, 76, 96, 136, 155, 194, 212, 244, 286) a networked system (Col. 55 lines 45-49, Col. 62 lines 15-40);

(Claims 10, 52, 77, 97, 137, 156, 195, 213, 245, 287) an optical network (Fig. 1-195);

(Claims 11, 53, 78, 98, 138, 157, 196, 214, 246, 288) a wireless network (Col. 58 lines 61-67, Col. 91 lines 5-25);

(Claims 12, 54, 79, 99, 139, 197, 215, 247, 289) an IP network (Col. 60 lines 19-32, Col. 63 lines 32-36, Col. 64 lines 34-39, Col. 88 lines 59-67, Col. 90 lines 57-61);

(Claims 13, 55, 80, 100, 140, 158, 198, 216, 248, 290) a layered network (Col. 56 lines 6-10, Col. 71 lines 15-59, Col. 79 lines 49-62, Col. 86 lines 36-60, Col. 89 lines 30-40, Col. 237 lines 50-58);

(Claims 15, 57, 82, 102, 142, 160, 200, 218, 250, 292) a messaging system (Col. 56-63, Col. 38 lines 57-62, Col. 55 lines 62-63, Col. 64 lines 40-67, Col. 212 lines 40-45, Col. 237 lines 50-58);

(Claims 16, 58, 83, 103, 143, 161, 201, 219, 251, 293) an ERP system (Col. 1 lines 20-26, Fig. 1-195);

(Claims 17, 59, 84, 104, 144, 162, 202, 220, 252, 294) a dynamic system (Col. 32 lines 29-37, Col. 230 lines 48-55, Col. 294 lines 36-59);

(Claims 18, 85, 105, 163, 221, 253) a static system (Col. 32 lines 29-37, Col. 283 lines 47-67);

(Claims 19, 60, 86, 106, 145, 164, 203, 222, 254, 295) wherein said system comprises a utility computing system, an autonomic computing system, a grid system, an on-demand system or an adaptive system (Fig. 1-195, Col. 71 lines 15-42, Col. 99 lines 19-27, Col. 108 lines 60-64);

(Claims 20, 61, 87, 107, 146, 165, 204, 223, 255, 296) wherein said system comprises a network, and wherein said plurality of realms comprises at least one realm modeling network infrastructure components and at least one realm modeling network security components (Col. 29 lines 46-58, Col. 34 lines 22-24, Col. 52 lines 17-60, Col. 56 lines 6-10, Col. 62 lines 15-40, Col. 67 lines 58-67, Col. 78 lines 63-67, Col. 80 lines 20-33, Col. 86 lines 33-50, Col. 98 lines 53-58, Col. 115 lines 49-67);

(Claims 21, 23, 256, 258, 299, 315) manual (Fig. 1-195, Col. 101 lines 45-56, Col. 105 lines 3-18);

(Claims 22, 24, 108, 109, 166, 167, 257, 259, 300, 316) automated based on given properties of said one or more components (Col. 53 lines 22-47, Col. 105 lines 3-49, Col. 116 lines 53-63, Col. 129 lines 11-57);

(Claims 25, 63, 110, 168, 260) identifying objects in different realms representing the same component (Fig. 1-195, Col. 101 lines 45-56);

(Claims 26, 64, 111, 169, 261) wherein the objects in different realms are generally identical (Fig. 1-195, Col. 101 lines 45-56, Col. 105 lines 3-49, Col. 125 lines 26-50);

(Claims 27, 65, 112, 170, 262) wherein the objects in different realms are different (Fig. 1-195, Col. 105 lines 3-49, Col. 125 lines 26-50);

(Claims 28, 66, 113, 171, 263) wherein the objects in different realms have different attributes (Fig. 1-195, Col. 105 lines 3-49);

(Claims 29, 67, 114, 172, 264) defining a relationship object between objects in different realms (Fig. 1-195, Col. 105 lines 3-49, Col. 128 lines 6-29, Col. 283 lines 8-67);

(Claims 30, 68, 115, 173, 265) wherein said plurality of realms are defined based on selecting subsets of components in said system (Fig. 1-195, Col. 105 lines 3-49, Col. 247 lines 29-65, Col. 261 lines 7-20);

(Claims 31, 69, 116, 174, 266) wherein said plurality of realms are defined based on different perspectives of the same component in said system (Fig. 1-195, Col. 105 lines 3-49, Col. 247 lines 29-65);

(Claims 32, 70, 117, 175, 267) wherein said plurality of realms are defined based on different levels of abstraction of the same component in said system (Fig. 1-195, Col. 105 lines 3-49, Col. 247 lines 29-65);

(Claims 33, 118, 176, 224, 268) monitoring said system (Col. 92 lines 5-62, Col. 115 lines 49-60);

(Claims 34, 119, 177, 225, 269) analyzing said system (Col. 127 lines 1-11, Col. 144 lines 56-63);

(Claims 35, 120, 178, 226, 270) control of said system (Col. 115 lines 49-60, Col. 130 lines 5-17);

(Claims 36, 121, 179, 227, 271) simulation of said system (Col. 139 lines 21-30, Col. 151 lines 22-35);

(Claims 37, 122, 180, 228, 272) visualization of said system (Col. 33 lines 15-22, Col. 188 lines 8-10, Col. 212 lines 41-45, Col. 251 lines 60-67, Col. 252 lines 7-18);

(Claims 38, 123, 181, 229, 273) configuration of said system (Col. 122 lines 16-25, Col. 124 lines 5-20, Col. 145 lines 16-23, Col. 252 lines 7-18);

(Claims 39, 124, 182, 230, 274) provisioning of said system (Col. 139 lines 21-30, Col. 251 lines 60-67, Col. 252 lines 7-18);

(Claims 40, 125, 183, 231, 275) design of said system (Col. 144 lines 56-63);

(Claims 41, 126, 184, 232, 276) propagation of behaviors of said system of said system across realms (Fig. 1-195, Col. 246 lines 29-37);

(Claims 44, 129, 187, 279) defining said plurality of realms based on one or more models of said system or portions thereof (Fig. 1-195, Col. 105 lines 1-49);

(Claims 45, 130, 188, 280) wherein said realms are defined by adding associations to one or more pre-existing models of the system (Fig. 1-195, Col. 105 lines 1-49).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 14, 56, 81, 101, 141, 159, 199, 217, 249, and 291 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (US Patent No. 6,289,382), and further in view of Semeria (Multiprotocol Label Switching: Enhancing Routing in the New Public Network).

Bowman-Amuah teach most all of the instant invention as applied to claims 1-13, 15-41, 44-55, 57-80, 82-100, 102-126, 129-140, 142-158, 160-184, 187-198, 200-216, 218-232, 235-248, 250-276, 279-290, 292-300, 302-307, 309, 310, 312, 313, and 315-319 above.

Bowman-Amuah fails to teach Multi-Protocol Label Switching Virtual Private Network.

Semeria teaches Multi-Protocol Label Switching Virtual Private Network (Page 15, Figure 9 and 11).

Bowman-Amuah and Semeria are analogous art because they are both related to network system.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include Multi-Protocol Label Switching Virtual Private Network of Semeria, in the method of manufacture for a globally addressable interface in communication services framework of Bowman-Amuah because Multi-Protocol Label Switching Virtual Private Network is a well known process in a method for manufacture for a globally addressable interface in communication services framework.

Semeria teaches advantages of improved Multi-Protocol Label Switching Virtual Private Network that permits ISPs to deliver new services that cannot be readily supported by

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conventional IP routing techniques and enhance routing capabilities by supporting more than just destination-based forwarding (Summary).

12. Claims 42, 43, 127, 128, 185, 186, 233, 234, 277, 278, 301, 308, 311, are 314 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (US Patent No. 6,289,382), and further in view of McGee et al. (US Pub. No 2003/0079160).

Bowman-Amuah teach most all of the instant invention as applied to claims 1-13, 15-41, 44-55, 57-80, 82-100, 102-126, 129-140, 142-158, 160-184, 187-198, 200-216, 218-232, 235-248, 250-276, 279-290, 292-300, 302-307, 309, 310, 312, 313, and 315-319 above.

Bowman-Amuah fails to teach (Claims 42, 127, 185, 233, 277) root cause analysis of events in said system of events in said system and (Claims 43, 128, 186, 234, 278, 301, 308, 311, 314) correlation of events of said system.

McGee et al. teaches (Claims 42, 127, 185, 233, 277) root cause analysis of events in said system of events in said system (Paragraph [0054] and [0058]); and

(Claims 43, 128, 186, 234, 278, 301, 308, 311, 314) correlation of events of said system (Paragraph [0054] and [0058]).

Bowman-Amuah and McGee et al. are analogous art because they are both related to an enterprise networked system.

Therefore, it would have been obvious to one of ordinary skill in the art of at the time the invention was made to include root cause analysis of events and correlation of events of McGee et al., in the method of manufacture for a globally addressable interface in communication services framework of Bowman-Amuah because root cause analysis of events and correlation of

events is a well known process in a method for manufacture for a globally addressable interface in communication services framework.

McGee et al. teaches advantages system that allows for users by a system manager, such as an web-based enterprise system manager, to assist, to achieve maintenance of Service Level Agreements in terms of system performance (Paragraph [0026] and [0051]).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goodman et al. (U.S. Patent No 7020697) discloses architectures for Netcentric computing system.

Johnston et al. discloses an enterprise management system to provide infrastructure assurance (Using Enterprise Management to Provide Infrastructure Assurance).

Buford et al. discloses Managing Dynamic IP Services system (Managing Dynamic IP Services: Correlation-Based Scenarios and Architecture).

Song et al. discloses a component based approach for modeling and validation of an automated manufacturing system (A component based approach for modeling and validation of an automated manufacturing system).

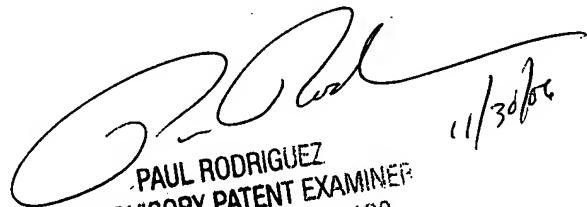
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eun H. Chung whose telephone number is 571-272-2164. The examiner can normally be reached on 8:30am-5:00pm Monday to Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EHC


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11/30/04